

REMARKS

This application has been reviewed in light of the final Office Action dated June 13, 2005. In view of the foregoing amendments and the following remarks, favorable reconsideration of the subject application is respectfully requested.

Claims 1, 6, 7, 9-13, 18, 19 and 21-31 are pending in this application. Claims 1, 13 and 25 have been amended. Support for the claim changes can be found in the original disclosure, and therefore no new matter has been added. Claims 1, 13 and 25 are in independent form.

In the final Office Action, Claims 22, 23, 29 and 30 were objected to on a formal ground. Specifically, the Examiner stated that the recitation “the table” at line 3 of these claims should be amended to “a table” in order to correct a lack of antecedent basis. However, Applicants note that line 2 of each of these claims recites “a table . . . ,” thereby providing proper antecedent basis. Accordingly, Applicants submit that these claims are in proper form and do not require amendment.

In the final Office Action, Claims 1, 12, 13, 24 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,240,384 (*Kagoshima et al.*) in view of U.S. Patent No. 4,980,916 (*Zinser*); Claims 6 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser* and further in view of U.S. Patent No. 5,913,193 (*Huang et al.*); Claims 7 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser* and further in view of *Huang et al.*, and further in view of U.S. Patent No. 6,366,833 (*Campbell et al.*); Claims 9 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser* and

further in view of *Campbell et al.*; Claims 10, 11, 22, 23, 25, 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser* and further in view of U.S. Patent No. 6,490,563 (*Hon et al.*); Claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser*, *Hon et al.* and *Huang et al.*; Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser*, *Hon et al.*, *Huang et al.* and *Campbell et al.*; and Claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kagoshima et al.* in view of *Zinser*, *Hon et al.* and *Campbell et al.* In view of those rejections, Applicants respectfully submit the following remarks.

Applicants submit that, for at least the reasons set forth below, the independent claims patentably distinguish the invention over all of the above-noted cited art, and Applicants request favorable reconsideration.

Independent Claim 1 recites, *inter alia*, distortion obtaining means for obtaining a respective modification distortion for each of a plurality of synthesis units, each respective modification distortion being a distortion between a respective unmodified individual synthesis unit and the individual synthesis unit after modification responsive to prosody of a text, wherein the modification is based on prosody information of an input text segment. Each of independent Claims 13 and 25 includes a corresponding feature.

Regarding *Kagoshima et al.*, the Office Action (page 5) states that “*Kagoshima* does not teach that the modification is obtained between an unmodified individual synthesis unit and the same individual unit after modification.” Applicants understand the Office Action concedes that *Kagoshima et al.* does not teach distortion obtaining means for obtaining a

respective modification distortion for each of a plurality of synthesis units, each respective modification distortion being a distortion between a respective unmodified individual synthesis unit and the individual synthesis unit after modification responsive to prosody of a text, wherein the modification is based on prosody information of an input text segment.

Regarding *Zinser*, the Office Action (page 5) cites *Zinser*'s teaching of "a pitch error minimizer, which compares a pitch-altered synthesized speech sequence to an input or unmodified sequence to determine a distortion (error)," as apparently curing the above-noted deficiency of *Kagoshima et al.* Notwithstanding this, however, the Office Action appears to acknowledge that the "modification" of Applicants' claimed invention is not the same as the process of *Zinser* cited by the Office Action. In that regard, Applicants have amended the independent claims herein to further clarify the recited modification and distortion. Specifically, the claimed modification is recited to be a modification based on prosody information of an input text segment, and the claimed distortion is recited to be a modification distortion being a distortion between a respective unmodified individual synthesis unit and the individual synthesis unit after modification responsive to prosody of a text.

Zinser is understood to teach comparing an output signal D from an LPC synthesis filter 11 to an LPC filtered input speech to choose a code word vector that minimizes code book error. No suggestion has been found in *Zinser* of using text prosody to modify individual synthesis units. *Zinser*'s comparison of input speech and an output LPC signal corresponding to the input speech for excitation signal correction is not understood to suggest in any manner comparing a synthesis unit with the synthesis unit modified according to prosody of

input text to obtain modification distortion of the synthesis unit for production of speech corresponding to the input text as in Claims 1, 13 and 25.

Applicants submit that *Zinser* does not teach distortion obtaining means for obtaining a respective modification distortion for each of a plurality of synthesis units, each respective modification distortion being a distortion between a respective unmodified individual synthesis unit and the individual synthesis unit after modification responsive to prosody of a text, wherein the modification is based on prosody information of an input text segment.

Since neither *Kagoshima et al.* nor *Zinser*, whether taken singly or in combination (even assuming, for the sake of argument, that such combination were permissible), contains all of the elements of independent Claim 1, that claim is believed allowable over those patents. Since each of independent Claims 13 and 25 recites features similar or identical to those of Claim 1, those claims are believed allowable for at least the same reasons.

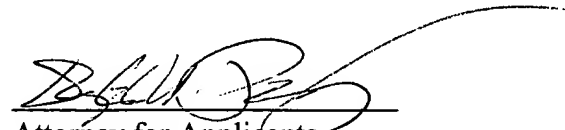
A review of the other art of record, including *Huang et al.*, *Campbell et al.* and *Hon et al.*, has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to the address listed below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'D. W. Pinsky', is written over a horizontal line.

Attorney for Applicants
Douglas W. Pinsky
Registration No. 46,994

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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